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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/505,459	02/11/2000	Tomomi Oshiba	KOT-0008	6309

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EXAMINER

NOTE, JANIS L

ART UNIT	PAPER NUMBER
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1756

DATE MAILED: 06/13/2003

15

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/505, 459

Applicant(s)

OSHIBA et al

Examiner

J. DOTE

Group Art Unit

1756

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- ☒ Responsive to communication(s) filed on 4/9/03
- ☒ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 1-5, 8-11, 13-17 is/are pending in the application.
- Of the above claim(s) _____ is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 1-5, 8-11, 13-17 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement

Application Papers

- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner
- ☒ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119 (a)-(d).
- ☒ All ☐ Some* ☐ None of the:
 - ☒ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a))

*Certified copies not received: _____

Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____
- ☐ Interview Summary, PTO-413
- ☐ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Other _____

Office Action Summary

1. The examiner acknowledges the cancellation of claim 12 and the amendment to claim 1 filed in Paper No. 14 on Apr. 9, 2003. Claims 1-5, 8-11, and 13-17 are pending.

2. The replacement paragraph beginning at page 8, line 12, of the specification, filed in Paper No. 12 on Jul. 29, 2002, defines the isolation ratio as "the number of non-synchronous light emission particles to the sum of the number of synchronous light emission particles and non-synchronous light emission particles." Applicants, in Paper No. 12, page 10, lines 12-13, state that the isolation ratio now disclosed in the replacement paragraph is consistent with the description of its measurement in the paragraph bridging pages 35 and 36 of the specification.

Applicants have thus retracted their previous definition of the isolation ratio in the originally filed paragraph beginning at page 8, line 12, of the specification. See Paper No. 14, page 8.

3. The objections to the specification set forth in the office action mailed on Oct. 9, 2002, Paper No. 13, paragraph 4, have been withdrawn in response to the amendments to (a) Table 1 at pages 29-31 of the specification, filed in Paper No. 14; the amendments to Table 2 at page 38 of the specification, filed in Paper No. 14; and (c) all of applicants' comments in Paper No. 14

at pages 9 and 10. As noted in paragraph 2 supra, the isolation ratio is defined as "the number of non-synchronous light emission particles to the sum of the number of synchronous light emission particles and non-synchronous light emission particles." See the replacement paragraph beginning at page 8, line 12, of the specification, filed in Paper No. 12. The term non-synchronous light emission particles is defined as particles "exhibiting [light] emission from the element but not exhibiting [light] emission from carbon," as recited in instant claim 1. Applicants state that these particles are particles comprising "the element, alone, . . . either in the form of a pigment, charge controlling agent, metal oxide or in elemental form" or particles that comprise "the element without the [toner] resin [binder]." See Paper No. 14, sentence bridging page 9, line 38, to page 10, line 4. The term "synchronous light emission particles" is defined as "particles exhibiting [light] emission from the element and exhibiting [light] emission from carbon," as recited in instant claim 1. Applicants state that these particles are particles that comprise "a resin binder and an element, whether in elemental form or in the form of a pigment, charge controlling agent, or metal oxide." See Paper No. 14, lines 37-38. In other words, in light of the disclosure in the instant specification, the particles that exhibit or emit light emission from carbon and light emission from the element as recited in instant claim 1 are

toner particles. The particles that emit or exhibit light emission from the element as recited in instant claim 1 are particles comprising the element, such as the element itself, e.g., elemental iron, or a pigment, charge controlling agent, or metal oxide, that are not incorporated in the toner particles during the formation of the toner particles. See the specification, page 9, line 4, to page 10, line 24; page 12, line 8, to page 13, line 3; page 16, lines 20-21; and page 19, line 5, to page 20, line 4; the paragraph bridging pages 11 and 12; and example 6 in Table 1.

The rejections of claims 1-5 and 8-17 under 35 U.S.C. 112, first paragraph, set forth in Paper No. 13, paragraph 7, have been withdrawn in response to the amendment to claim 1 and all of applicants' comments set forth in Paper No. 14, page 11. Applicants state that "they have not suggested that the elements include external additives." See Paper No. 14, page 11, lines 15-16. Applicants state that "the element is not exclusively found in the color resin particles of the toner . . . that some of the element may not be found in the resin particle, while the rest is found in the resin particle." See Paper No. 14, page 11, lines 16-18. Applicants further state that "the element is not exclusively found within the colored resin particles of the toner, but can be a particle on their own." Paper No. 14, page 11, lines 20-21. In other words, in view of

the disclosure in the specification, the particles comprising the element are particles of the element that are not incorporated in the toner particles (i.e., particles comprising the resin binder and particles of the element) during the formation of the toner particles. The particles comprising the element are not an additive externally added to the preformed toner particles. See the specification, page 9, line 4, to page 10, line 24; page 12, line 8, to page 13, line 3; page 16, lines 20-21; and page 19, line 5, to page 20, line 4; the paragraph bridging pages 11 and 12; and example 6 in Table 1.

The rejection of claims 1-5 and 8-17 under 35 U.S.C. 112, first paragraph, set forth in Paper No. 13, paragraph 8, has been withdrawn in response to all of applicants' comments in Paper No. 14, page 12.

The rejection of claims 1-4, 8-12, 14, and 15 under 35 U.S.C. 102(b)/103(a) over US 5,376,493 (Kobayashi), as evidenced by ACS File Reg. No. 147-14-8, set forth in Paper No. 13, paragraph 9, has been withdrawn in response to the showing in the Rule 132 declaration executed by Hiroshi Yamazaki on Jul. 4, 2002, filed on Jul. 29, 2002, attached to Paper No. 12. The declaration shows that the toner in Kobayashi's example 3 does not have an isolation ratio of not more than 10% as recited in instant claim 1. For all the reasons set forth by applicants in

Paper No. 14, page 15, Kobayashi does not render the instant claimed toner obvious.

(Contrary to applicants' statement in Paper No. 14, page 15, lines 15-16, there is only one Rule 132 declaration executed by Hiroshi Yamazaki, not two. That declaration is the one executed by Hiroshi Yamazaki on Jul. 4, 2002, which was filed by applicants in Paper No. 12 on Jul. 29, 2002. The present record does not contain a second Rule 132 declaration executed by Hiroshi Yamazaki on Jul. 29, 2002. In addition, as noted in Paper No. 13, page 15, the results for examples 5 and 9-13 of the specification reported in the declaration are not probative because the compositions of those examples are not known.)

4. The disclosure is objected to because of the following informalities:

(1) The specification at page 27, line 9, recites the phrase "<Examples 1 to 16 and Comparative Examples of 1 to 2>."

However, amended Table 1 filed in Paper No. 14 does not report the compositions of examples 5 and 7-15.

(2) The specification at page 36, lines 11-12, and page 37, line 6, refers to "Examples 5 to 18." However, amended Table 2 does not report the results for examples 5 and 7-15.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claim 13 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 13 is indefinite because it is dependent on canceled claim 12. It is not clear from what claim applicants intend claim 13 to depend.

7. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

8. Claims 1-4, 8-11, and 14 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over US 5,5,856,055 (Ugai).

The claims are rejected for the reasons set forth in the office action mailed on Apr. 8, 2002, Paper No. 11, paragraph 12, which are incorporated herein by reference.

9. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ugai.

The claims are rejected for the reasons set forth in Paper No. 11, paragraph 13, which are incorporated herein by reference.

10. Claims 1-3, 8-11, 14, and 17 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over US 5,645,967 (Sato).

The claims are rejected for the reasons set forth in Paper No. 11, paragraph 14, which are incorporated herein by reference.

11. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sato combined with US 5,037,715 (Hagiwara).

The claims are rejected for the reasons set forth in Paper No. 11, paragraph 15, which are incorporated herein by reference.

12. Claims 1-3, 5, 8-11, 13, 14, and 17 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over US 6,238,836 B1 (Nakamura).

The claims are rejected for the reasons set forth in Paper No. 11, paragraph 17, which are incorporated herein by reference.

13. Applicants' arguments filed in Paper No. 14 with respect to the rejections over Ugai, Sato, and Nakamura set forth in

paragraphs 8-12 above have been fully considered but they are not persuasive.

Applicants assert that the prior art neither anticipates nor renders obvious the instant claimed toners because the prior art toners do not have the isolation ratio recited in the instant claims, as shown by the Rule 132 declaration executed by Hiroshi Yamazaki on Jul. 4, 2002, filed in Paper No. 12.

Applicants' arguments are not persuasive. The showing in the declaration is insufficient to show that the prior art toners do not have an isolation ratio as recited in the instant claims because the declaration does not appear to adequately compare to the prior art toners.

With respect to the toners disclosed by Ugai, declarant states that the amounts of Fe in the toners in Samples Q and R are 0.22 wt% and 0.13 wt%, respectively. Declarant states that Samples Q and R are representative of the toners in examples Q and R in Ugai. See the table in the declaration. However, as set forth in the rejection in paragraph 8 above, the examiner has determined the amounts of Fe in the toners of Ugai's examples Q and R to be 0.13 wt% and 0.22 wt%, respectively. Applicants have not controverted the amounts of Fe determined by the examiner. Moreover, it is not clear how the toner in Sample Q comprises more Fe than the toner in Sample R. The toner in Sample Q is supposed to comprise Ugai's azo iron compound (1) in an amount

less, i.e., 2.2 wt%, than the amount, i.e., 3.6 wt%, used in the toner in Sample R. See Ugai, Table 3, col. 26.

With respect to the toner disclosed by Sato, declarant states that the amount of Cr in the toner of Sample S is 0.14 wt%. Declarant states that Sample S is representative of the toner in Sato's example 23. See the table in the declaration. However, as set forth in the rejection in paragraph 10 above, the examiner has determined the amount of Cr in the toner in Sato's example 23 to be about 0.4 wt%. Applicants have not controverted the amount of Cr determined by the examiner. (It is also noted that the declarant refers to the reference Kobayashi in describing the preparation of Sample S in the declaration. See declaration, paragraph 5.)

With respect to the toner disclosed by Nakamura, declarant states that "[t]oner sample S was prepared in accordance with the description of Example 23. A jet mill was employed to pulverize colored resin in the preparation of toner particles since no other measure was disclosed by Kobayashi than jet-mill." See the declaration, paragraph 6. However, Nakamura does not disclose an example 23, but discloses a toner of "embodiment 6." In addition, the table in the declaration reports that Sample N is representative of Nakamura, not Sample S. There is no discussion of how the toner in Sample N is made. Accordingly, there is no basis to conclude that Sample N is representative of Nakamura.

Thus, the declaration does not appear to adequately compare to the toners disclosed by Ugai, Sato, and Nakamura. Accordingly, the declaration does not show that the prior art toners do not have the isolation ratio recited in the instant claims and the rejections stand.

14. Claims 1-4, 8-11, 14, and 16 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over US 5,672,454 (Sasaki'454), as evidenced by ACS File Registry No. 1317-61-9.

Sasaki'454 discloses a toner comprising encapsulated toner particles. The toner particles comprise cores comprising a binder resin and triiron tetraoxide magnetic powder covered with a polymeric shell. See example 1 at cols. 14-15. Triiron tetraoxide is also known as magnetite. See ACS File Registry No. 1317-61-9. The triiron tetraoxide powder is present in the toner particles in an amount of about 42.1 parts by weight per 100 parts by weight of particles. The amount of Fe in the toner particles is about 30 wt% based on the total weight of the toner particles (i.e., $(42.1 \text{ parts by weight} / 100 \text{ parts by weight}) \times ((3 \times 55.85 \text{ atomic weight of Fe}) / (231.54 \text{ formula weight of triiron tetraoxide})) \times 100$). The amount of triiron tetraoxide is determined from the information provided in example 1. The amount of about 30 wt% is within the range of "not less than

0.1 wt%" recited in instant claim 1. The toner can be used with a carrier. Col. 4, lines 38-41, and col. 13, lines 3-4. The toner in example 1 is obtained by an emulsion polymerization method as recited in instant claim 8. Sasaki'454 further discloses that said toner can be used in a process comprising the steps recited in instant claim 11. See col. 13, lines 12-33, and col. 18, lines 20-30.

Sasaki'454 does not disclose that its toner comprises iron in an isolation ratio as recited in the instant claims. However, Sasaki'454 discloses that there is no magnetic powder present on the surface of its toner particles as determined by TEM. Col. 15, lines 21-22, and Fig. 2. Because Sasaki'454's toner meets the compositional limitations of the instant claims and has no magnetic powder (loose magnetic powder) present on the surface of the toner particles, it is reasonable to presume that Sasaki'454's toner comprises the element iron in an isolation ratio as recited in the instant claims. The burden is on applicants to prove otherwise. In re Fitzgerald, 205 USPQ 594 (CCPA 1980).

15. Claims 1-4, 8-11, 14, and 15 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over US 5,763,130 (Sasaki'130).

Sasaki'130 discloses a toner comprising encapsulated toner particles. The toner particles comprise cores comprising a binder resin and Cu-phthalocyanine covered with an amorphous polyester shell. See example 2 at col. 19. Cu-phthalocyanine has a molecular weight of 576.08. Cu-phthalocyanine is present in the toner in an amount of 0.98 wt%. The amount of copper present in the toner is about 0.11 wt% based on the total weight of the toner (i.e., $(0.98 \text{ wt\%} \times (63.54 \text{ atomic weight of Cu}) / (576 \text{ molecular weight of Cu-phthalocyanine}))$). The amount of Cu-phthalocyanine is determined from the information provided in example 2. The amount of 0.11 wt% is within the range of "not less than 0.1 wt%" recited in instant claim 1. The toner can be used with a carrier. Col. 23, lines 51-56. The toner in example 2 is obtained by an emulsion polymerization method as recited in instant claim 8. Sasaki'130 further discloses that said toner can be used in a process comprising the steps recited in instant claim 11. See col. 1, lines 20-32, and col. 24, lines 26-33.

Sasaki'130 does not disclose that its toner comprises copper in an isolation ratio as recited in the instant claims. The instant specification discloses that toners that comprise an element as recited in instant claim 1 in an isolation ratio as recited in the instant claims, have stable chargeability after 10,000 copies, and provide toner images without fog even after

100,000 copies. See Table 2 at page 38, and the accompanying text. Sasaki'130's toner of example 2 exhibits stable chargeability after 50,000 copies, and provides toner images free from fog after 50,000 copies. See example 2 in Table 3 at col. 24. Because Sasaki'130's toner expressly meets the compositional limitations of the instant claims, but for the isolation ratio recited in the instant claims, and has the properties sought by applicants, it is reasonable to presume that Sasaki'130 toner comprises the element copper in an isolation ratio as recited in the instant claims. The burden is on applicants to prove otherwise. Fitzgerald, supra.

16. Applicants' arguments filed in Paper No. 14 with respect to the rejections set forth in paragraphs 14 and 15 above have been fully considered but they are not persuasive.

Applicants argue that claim 1 is not anticipated or rendered obvious by the either Sasaki'454 or Sasaki'130 because neither reference teaches that its toner has an isolation ratio recited in instant claim 1.

However, as discussed in the rejections in paragraphs 14 and 15 above, the toners disclosed by Sasaki'454 or by Sasaki'130 meet the compositional limitations of the toner recited in the instant claims. Sasaki'454 also discloses that its toner has no magnetic powder (loose magnetic powder) present on the surface of

its toner particles. Thus, it would appear that the isolation ratio of Fe in Sasaki'454's toner is zero because there is no magnetic powder present in Sasaki'454's toner to exhibit light emission only from Fe. In addition, the toner disclosed by Sasaki'130 also appears to exhibit properties that are substantially identical to those exhibited by the instant claimed invention. The toner disclosed by Sasaki'130 exhibits stable chargeability and provide toner images without fog. The instant specification discloses that toners comprising an element in an isolation ratio as recited in the instant claims also exhibit stable chargeability and provide toner images without fog. Thus, the examiner has presented a reasonable basis to support her determination that the alleged inherent characteristics flow from the teachings of the prior art. Thus, a prima facie case has been established that the toners disclosed by the prior art are the same or substantially the same as that claimed by applicants. Applicants have not presented any objective evidence to show otherwise. Accordingly, the rejections stand.

17. Applicants' amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicants are

reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Janis L. Dote whose telephone number is (703) 308-3625. The examiner can normally be reached Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Mark Huff, can be reached on (703) 308-2464. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9311 (Rightfax) for after final faxes, and (703) 872-9310 for other official faxes.

Any inquiry of papers not received regarding this communication or earlier communications should be directed to Supervisory Application Examiner Ms. Palestine Jenkins, whose telephone number is (703) 308-3521.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

JLD
June 11, 2003

Janis L. Dote
JANIS L. DOTE
PRIMARY EXAMINER
GROUP 1500
1700